

Issuance Date: July 16, 2003  
Effective Date: August 1, 2003  
Expiration Date: June 30, 2008

STATE WASTE DISCHARGE PERMIT

STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY  
PO BOX 7600  
OLYMPIA, WA 98504-7600

In compliance with the provisions of  
Chapter 90.48 RCW, as amended,  
and Chapter 173-216 WAC, as amended

**Sharp Laboratories of America, Inc.**  
**5700 Northwest Pacific Rim Boulevard**  
**Camas, Washington 98607**

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<u>Plant Location:</u> 5700 Northwest Pacific Rim Blvd Camas, Washington 98607	<u>Publicly Owned Treatment Works (POTW) Receiving Discharge:</u> City of Camas Sewage Treatment Plant
<u>Industrial Type:</u> Research Facility for Semiconductor liquid Crystal Display Assembly	<u>Discharge Location Description:</u> Columbia River via Camas Sewage Development and Treatment Plant
	<u>Latitude:</u> 45° 35' 44" <u>Longitude:</u> 122° 23' 17"

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is authorized to discharge in accordance with  
the general and special conditions which follow.

*Original signed by:*

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Kelly Susewind, P.E., P.G.  
Southwest Region Manager  
Water Quality Program  
Washington State Department of Ecology

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### SUMMARY OF SUBMITTALS

The following is a list of the items that must be submitted during the term of this permit:

<u>Permit Section</u>	<u>Submittal</u>	<u>Frequency</u>	<u>Date of First Submittal</u>
S3.A.	Discharge Monitoring Report	Monthly	September 15, 2003
S3.A.	Certification of Proper Management of Toxic Organics	Quarterly	October 15, 2003
S3.G.	Automatic Resample Report	As Needed	Within 30 days of resample
S4.	Spill Control Plan	1/permit cycle	November 1, 2003
S5.	Toxic Organic Management Plan	1/permit cycle	February 1, 2004
G4.	Potential and Actual Noncompliance	As Needed	Within 24 hours of violation or potential violation
G6.	Planned Change	As Needed	90 days prior to planned change
G14.	Application for Permit Renewal	1/permit cycle	January 1, 2007

## SPECIAL CONDITIONS

### S1. EFFLUENT LIMITATIONS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge subject to meeting the following limitations:

EFFLUENT LIMITATIONS		
<u>Parameter</u>	<u>Monthly Average</u> <sup>1</sup>	<u>Daily Maximum</u> <sup>2</sup>
Flow	35,500 gpd	48,000 gpd
Fluoride	17.4 mg/L	32 mg/L
Total Toxic <sup>3</sup> Organics (TTO)	-----	1.37 mg/L
pH	Within a range of 5.5 to 11.0 standard units	

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<sup>1</sup>Monthly Average -- The arithmetic mean of the values for all effluent samples collected during a calendar month or a specified 30-day period (as opposed to a rolling 30-day window). If only one sample is collected during a given month, that sample is subject to the monthly average standard.

<sup>2</sup>Daily Maximum -- The maximum allowable discharge of pollutant during a calendar day. Where daily maximum limitations are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limitations are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.

<sup>3</sup>The complete list of toxic organics comprising TTO is obtained in 40 CFR 469.12.

S2. MONITORING SCHEDULE

The Permittee shall monitor the wastewater according to the following schedule:

<u>Parameter</u>	<u>Sampling Frequency</u>	<u>Sample Type</u>
Flow	Daily	Metered
pH	Daily	Metered
Fluoride	Monthly	24-hour composite
TTO	Semi-annually	Grab

S3. MONITORING AND REPORTING

The Permittee shall monitor and report in accordance with the following conditions.

A. Reporting

The results of the monitoring required by Special Condition S2 shall be reported monthly. Monitoring results obtained during the month shall be summarized and reported on a form provided by or approved by the Department of Ecology (hereafter referred to as the Department), to be received or submitted no later than the 15th day of the month following the completed reporting period. The report shall be sent to: Industrial Unit Permit Coordinator, Department of Ecology, Southwest Region – Water Quality, P.O. Box 47775, Olympia, Washington, 98504-7775. Monitoring shall be started on the effective date of the permit.

The Permittee shall submit a certification of proper management of toxic organics with each DMR submittal. This certification shall include the following statement:

“Based on my inquiry of the person or persons directly responsible for managing compliance with the pretreatment standard for total toxic organics (TTO), I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since filing the last discharge monitoring report. I further certify that this facility is implementing the solvent management plan submitted to the control authority.”

B. Records Retention

The Permittee shall retain for a minimum of three years all records of monitoring activities and results, including all reports and original chart recordings from continuous monitoring instrumentation. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee when requested by the Department.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, time, and methods of sampling or measurements, and sample preservation techniques or procedures; (2) who performed the sampling or measurements; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or method used; and (6) the results of all analyses.

D. Representative Sampling

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored discharge(s).

E. Test Procedures

All sampling and analytical methods used to meet the monitoring requirements specified in this permit shall, unless approved otherwise in writing by the Department, conform to the Guidelines Establishing Test Procedures for the Analysis of Pollutants, contained in 40 CFR 136.

F. Laboratory Accreditation

After July 1, 1994, all monitoring data, except for flow, temperature, and internal process control parameters, shall be prepared by a laboratory registered or accredited under the provisions of, Accreditation of Environmental Laboratories, Chapter 173-50 WAC. Soils and hazardous waste data are exempted from this requirement pending certification of laboratories for analysis of these media by the Department.

G. Automatic Resampling

If the results of the Permittee's wastewater analysis indicate a violation has occurred, the Permittee must notify the Department within 24 hours of becoming aware of the violation and repeat the sampling and pollutant analysis and submit, in writing, the results of this repeat analysis within 30 days after becoming aware of the violation.

H. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit (S2.) the monitoring should be done using acceptable test procedures and the results of this monitoring shall be included in the Permittee's self-monitoring reports.

I. Flow Measurements

If flow measurement is required by this permit, the appropriate flow measurement devices and methods consistent with approved scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.

The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations or

at a minimum frequency of at least one calibration per year.

J. Signatory Requirements

All applications, reports, or information submitted to the Department shall be signed and certified.

1. All permit applications shall be signed by either a principal executive officer of at least the level of vice-president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.
2. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
  - a. The authorization is made in writing by a person described above and submitted to the Department, and
  - b. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)
3. Changes to authorization. If an authorization under paragraph J.2.b is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of J.2.b must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.
4. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations."

K. Dangerous Waste Discharge Notification

The Permittee shall notify the POTW and the Department in writing of the intent to discharge into the POTW any substance designated as a dangerous waste in accordance



with the provisions of WAC 173-303-070. This notification shall be made at least 90 days prior to the date that discharge is proposed to be initiated.

L. Spill Notification

The Permittee shall notify the POTW immediately (as soon as discovered) of all discharges that could cause problems to the POTW, such as process spills and unauthorized discharges (including slug discharges).

S4. SPILL PLAN

Within 90 days from the effective date of this permit, the Permittee shall prepare and submit to the Department a spill plan for the facility covered by this permit. The plan and any subsequent revisions shall become effective 30 days following submission. Such plan shall include the following information and procedures relating to the prevention of process spills and unauthorized discharges (including slug discharges):

- A. A description of a reporting system to be used to immediately notify facility management, the POTW operator, and appropriate state, federal, and local authorities of any spills or unauthorized discharges;
- B. A description of operator training, equipment, and facilities (including overall facility plan) for the prevention, containment, or treatment of spills and unauthorized discharges;
- C. A list of all raw materials, products, chemicals, and hazardous materials used, processed, or stored at the facility, including the normal quantity maintained on the premises for each listed material;
- D. A brief description of any spills or unauthorized discharges which occurred during the 36-month period preceding the effective date of this permit and subsequent measures taken by Permittee to prevent or to reduce the possibility of further spills or unauthorized discharges; and
- E. An implementation schedule for additional operator training, equipment, or facilities which might be required.

The Permittee shall periodically review its spill plan and update it as may be appropriate. All revisions or updates of this plan shall be submitted to the Department. The original plan and its subsequent revisions shall be maintained on the plant site and readily available to facility personnel. The Permittee shall submit an update of the spill plan with the application for permit renewal.

Submittal of this plan, in accordance with this requirement, does not relieve the Permittee from compliance with, nor ensure compliance with, the federal spill prevention requirement contained in 40 CFR Part 112 of the Federal Register. Oil spill prevention, control, and countermeasure plans prepared in accordance with the above federal requirement may be used in partial fulfillment of this permit requirement.

S5. TOXIC ORGANICS MANAGEMENT PLAN

Within 180 days from the effective date of this permit, the Permittee shall prepare and submit to the Department a toxic organics management plan for the facility covered by this permit. The plan and any subsequent revisions shall become effective 30 days following submission. Such plan shall include the following information and procedures relating to the management of toxic organics:

1. A list of all toxic organics utilized at the facility including normal quantities maintained on the premises. This list must be updated as processes are modified.
2. The toxic organics included in the list shall be included in the spill plan as required in S4 of this permit.
3. A description of the methods of segregating toxic organics from the wastewater and evaluation of methods of solvent substitution and process modifications to eliminate or modify use of solvents.
4. A description of the solvent storage procedures and spent solvent disposal methods.
5. A description of employee training, maintenance and inspection scheduling, equipment and facilities for the prevention of toxic organics entering the wastewater stream.

The Permittee shall periodically review its plan and update it as may be appropriate. All revisions or updates of this plan shall be submitted to the Department. The original plan and its subsequent revisions shall be maintained on the plant site and readily available to facility personnel. The Permittee shall submit an update of the plan with the application for permit renewal.

S6. PROHIBITED DISCHARGES

The Permittee shall comply with these General and Specific Prohibitions.

A. General Prohibitions

The Permittee shall not introduce into the POTW pollutant(s) which cause:

1. Pass through, or
2. Interference.

B. Specific Prohibitions

In addition, the following shall not be introduced into the POTW:

1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60°C (140°F) using the test methods specified in 40 CFR 261.21.
2. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges;
3. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;
4. Any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
5. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40°C (104°F) unless the approval authority, upon request of the POTW, approves alternative temperature limits;
6. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
7. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;
8. Any trucked or hauled pollutants, except at discharge points designated by the POTW.

C. Prohibited Unless Approved

Any of the following discharges are prohibited unless approved by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or a need to augment sewage flows due to septic conditions):

1. Noncontact cooling water in significant volumes.
2. Storm water and other direct inflow sources.
3. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

S7. DILUTION PROHIBITED

The Permittee shall not dilute the wastewater discharge with stormwater or increase the use of potable water, process water, noncontact cooling water, or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

S8. BYPASSES

A. Bypass Allowed

The Permittee may allow any bypass to occur which does not cause pretreatment standards or the terms and conditions of this permit to be violated, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of B. and C. of this section.

B. Bypass Notice

1. **Anticipated Bypass.** If the Permittee knows in advance of the need for a bypass, the Permittee shall submit prior notice to the Department in writing at least 60 days prior to the date of the bypass.
2. **Unanticipated Bypass.** The Permittee shall submit oral notice of an unanticipated bypass that exceeds applicable Pretreatment Standards to the Department within 24 hours from the time the Permittee becomes aware of the bypass. A written submission shall also be provided within five days of the time the Permittee becomes aware of the bypass. The written submission shall contain a description of the bypass and its cause; the duration of the bypass, including exact dates and times, and, if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass. The Department may waive the written report on a case-by-case basis if the oral report has been received within 24 hours.

C. Bypass Prohibited

Bypass is prohibited unless: 1) bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; 2) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgement to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and 3) the Permittee submitted notices as required in Section B. above.

After consideration of the factors above and the adverse effects of the proposed bypass, the Department will approve or deny the request. Approval of a request to bypass will be by administrative order under RCW 90.48.120.

**Severe property damage** means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

**Bypass** means the intentional diversion of wastestreams from any portion of a Permittee's treatment facility.

S9. UPSETS

If for any reason, the Permittee does not comply with, or will be unable to comply with, any of the discharge limitations or other conditions specified in the permit, the Permittee shall, at a minimum, provide the Department and the local sewage treatment plant manager with the following information:

- A. A description of the nature and cause of noncompliance, including the quantity and quality of any unauthorized waste discharges;
- B. The period of noncompliance, including exact dates and times and/or the anticipated time when the Permittee will return to compliance; and
- C. The steps taken, or to be taken, to reduce, eliminate, and prevent recurrence of the noncompliance.

In the case of any discharge subject to any applicable toxic pollutant effluent standard under Section 307(a) of the Clean Water Act, or which could constitute a threat to human health, welfare, or the environment, 40 CFR Part 403.16 requires that the information specified in Sections S9.A., B., and C., above, shall be provided not later than 24 hours from the time the Permittee becomes aware of the circumstances. If this information is provided orally, a written submission covering these points shall be provided within five days of the time the Permittee becomes aware of the circumstances, unless the Department waives or extends this requirement on a case-by-case basis.

All other requirements of 40 CFR 403.16 (Upset Provisions) are incorporated in this permit by reference.

## GENERAL CONDITIONS

### G1. DISCHARGE VIOLATIONS

The Permittee shall at all times be responsible for continuous compliance with the terms and conditions of this permit. Failure to comply with the terms and conditions of this permit constitutes a violation of RCW 90.48.144. Such violations may result in orders, directives or penalties being issued by the Department.

### G2. PROPER OPERATION AND MAINTENANCE

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit. Where design criteria have been established, the Permittee shall not permit flows or waste loadings to exceed approved design criteria.

### G3. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee shall control production or discharge to the extent necessary to maintain compliance with the terms and conditions of this permit upon reduction of efficiency, loss, or failure of its treatment facility until the treatment capacity is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power for the treatment facility is reduced, lost, or fails.

### G4. NONCOMPLIANCE NOTIFICATION

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

- A. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, and correct the problem;
- B. Immediately notify the Department of the failure to comply; and
- C. Submit a detailed written report to the Department within 30 days, unless requested earlier by the Department, describing the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

### G5. RIGHT OF ENTRY

Representatives of the Department shall have the right to enter at all reasonable times in or upon any property, public or private, for the purpose of inspecting and investigating conditions relating to the pollution or the possible pollution of any waters of the state. Reasonable times shall include normal business hours; hours during which production, treatment, or discharge occurs; or times when the

Department suspects a violation requiring immediate inspection. Representatives of the Department shall be allowed to have access to, and copy at reasonable cost, any records required to be kept under terms and conditions of the permit; to inspect any monitoring equipment or method required in the permit; and to sample the discharge, waste treatment processes, or internal waste streams.

G6. PERMIT MODIFICATIONS

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering reports and engineering plans and specifications, whenever a new or increased discharge or change in the nature of the discharge is anticipated which is not specifically authorized by this permit. The application shall be submitted at least 60 days prior to any proposed changes. Submission of the application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G7. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and engineering plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Facilities shall be constructed and operated in accordance with the approved plans.

G8. PAYMENT OF PERMIT FEES

The Permittee shall pay the required wastewater discharge permit fees assessed in accordance with Chapter 173-224 WAC. The Department may terminate this permit for nonpayment of fees or late-payment penalties.

G9. PERMIT TERMINATION

A permit shall be subject to termination upon 30 days notice in writing if the Department finds:

- A. That it was procured by misrepresentation of any material fact or by lack of full disclosure in the application;
- B. That there has been a violation of the conditions thereof; or
- C. That a material change in quantity or type of waste disposal exists.

G10. PERMIT REOPENER

This permit may be modified in whole or in part for the following causes:

- A. Violation of any permit term or condition;
- B. Obtaining a permit by misrepresentation or failure to fully disclose all relevant facts;
- C. A material change in quantity or type of waste disposal; or
- D. A material change in the condition of the waters of the state affected by this permit.

The Department may also modify this permit, including the schedule of compliance or other conditions, if it determines good and valid cause exists, including promulgation or revisions of categorical standards.

G11. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G12. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be resuspended or reintroduced to the effluent stream for discharge.

G13. PERMIT TRANSFER

This permit is automatically transferred to a new owner or operator if:

- A. A written agreement between the old and new owner or operator containing a specific date for transfer of permit responsibility, coverage, and liability is submitted to the Department; and
- B. The Department does not notify the Permittee of the need to modify the permit.

Unless this permit is automatically transferred according to Section A. above, this permit may be transferred only if it is modified to identify the new Permittee and to incorporate such other requirements as determined necessary by the Department.

G14. DUTY TO REAPPLY

The Permittee must reapply, for permit renewal, at least 60 days prior to the specified expiration date of this permit.